

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

Atty Dkt. 4170-82

C# M#

Pedersen et al.

MAY 15 2003

Group Art Unit: 1651

Serial No. 09/905,638

Examiner: Gitomer

Filed: July 13, 2001

Date: May 15, 2003

Title: METHODS OF DETECTING URACIL BIOSYNTHESIS INHIBITORS AND THEIR  
USES AS HERBICIDES

RECEIVED

MAY 19 2003

TECH CENTER 1600/2900

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

**RESPONSE/AMENDMENT/LETTER**

This is a response/amendment/letter in the above-identified application and includes an attachment which is hereby incorporated by reference and the signature below serves as the signature to the attachment in the absence of any other signature thereon.

☐ **Correspondence Address Indication Form Attached.****Fees are attached as calculated below:**

Total effective claims after amendment 0 minus highest number  
previously paid for 20 (at least 20) = 0 x \$ 18.00 \$ 0.00

Independent claims after amendment 0 minus highest number  
previously paid for 3 (at least 3) = 0 x \$ 84.00 \$ 0.00

If proper multiple dependent claims now added for first time, add \$280.00 (ignore improper) \$ 0.00

Petition is hereby made to extend the current due date so as to cover the filing date of this  
paper and attachment(s) (\$110.00/1 month; \$410.00/2 months; \$930.00/3 months) \$ 0.00

Terminal disclaimer enclosed, add \$ 110.00 \$ 0.00

☐ First/second submission after Final Rejection pursuant to 37 CFR 1.129(a) (\$750.00) \$ 0.00

☐ Please enter the previously unentered , filed

☐ Submission attached

**Subtotal \$ 0.00**

If "small entity," then enter half (1/2) of subtotal and subtract -\$ 0.00

☐ Applicant claims "small entity" status. ☐ Statement filed herewith

Rule 56 Information Disclosure Statement Filing Fee (\$180.00) \$ 0.00

Assignment Recording Fee (\$40.00) \$ 0.00

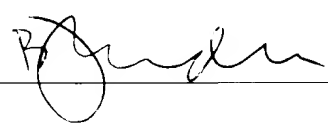
Other: Information Disclosure Statement; PTO-1449 Form; 19 Documents 0.00

**TOTAL FEE ENCLOSED \$ 0.00**

The Commissioner is hereby authorized to charge any deficiency, or credit any overpayment, in the fee(s) filed, or asserted to be filed, or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Account No. 14-1140. A duplicate copy of this sheet is attached.

1100 North Glebe Road, 8<sup>th</sup> Floor  
Arlington, Virginia 22201-4714  
Telephone: (703) 816-4000  
Facsimile: (703) 816-4100  
BJS:plb

NIXON & VANDERHYE P.C.  
By Atty: B. J. Sadoff, Reg. No. 36,663

Signature: 



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

Pedersen et al.

Atty. Ref.: 4170-82

Serial No. 09/905,638

Group: 1651

Filed: July 13, 2001

Examiner: Gitomer

For: METHODS OF DETECTING URACIL BIOSYNTHESIS  
INHIBITORS AND THEIR USES AS HERBICIDES

\* \* \* \* \*

RECEIVED

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

May 15, 2003

MAY 19 2003

TECH CENTER 1600/2900

Sir:

**INFORMATION DISCLOSURE STATEMENT**

- ☒ 1. **PTO-1449 Pursuant to 37 CFR 1.97(b)**  
[within 3 months of filing or prior to 1st Office Action on the merits]  
N/C
- ☐ 2.(a) **Statement Pursuant to 37 CFR 1.97(c)**  
[before Final Office Action or Allowance (requires Rule 97(e)  
Statement or Rule 17(p) fee)]  
N/C
- ☐ 2.(b) **Fee Payment Pursuant to 37 CFR 1.97(c)**  
[before Final Office Action or Allowance (requires Rule 97(e)  
Statement or Rule 17(p) fee)]  
\$180.00
- ☐ 3. **Pursuant to 37 CFR 1.97(d)**  
[after Final Office Action or Allowance (requires Rule 97(e)  
Statement and Rule 17(p) fee), but before final fee payment]  
\$180.00

The following are submitted in the above-identified application in compliance with  
37 C.F.R. §§ 1.97 and 1.98:

- ☒ 4. A list of documents on Form PTO-1449 together with copies of each  
identified document and a translation or a concise explanation of

each non-English language document (such as a Search Report) is enclosed herewith.

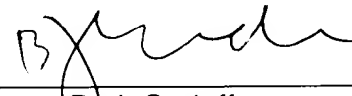
This paper is submitted in accordance with:

- ☒ 5. 37 CFR 1.97(b): [within 3 months of filing or prior to 1st Office Action]
- ☐ 6. 37 CFR 1.97(c): [before Final Office Action or Allowance, whichever is earlier]; and
  - ☐ a) The required Statement made in item 8 below; or
  - ☐ b) The \$180.00 fee specified in 37 CFR §1.17(p) for submission of this Information Disclosure Statement is authorized in item 9 below.
- ☐ 7. 37 CFR §1.97(d): [after Final Office Action or Allowance (requires Rule 97(e) Statement and Rule 17(p) fee), but before final fee payment]; and
  - ☐ a) The fee (\$180.00) required by 37 CFR §1.17(p) is submitted herewith; and
  - ☐ b) The required Statement is stated in item 8 below.
- ☐ 8. Statement under 37 CFR 1.97(e)
  - ☐ a) The undersigned attorney of record hereby certifies under 37 C.F.R. §1.97(e) that each item of information contained in this Information Disclosure Statement was first cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement (each item contained in this IDS was the first citation of that item by a foreign patent office in a counterpart foreign application which occurred no more than three months prior to the filing of this IDS); or
  - ☐ b) No item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing this Statement, after making reasonable inquiry, no item of information contained in this Statement was known to any individual designated in 37 CFR §1.56(c) more than three months prior to the filing of this Information Disclosure Statement.
- ☒ 9. Please charge all deficiency fees associated with the submission of this Information Disclosure Statement and any other fees applicable to this application to Deposit Account No. 14-1140. An original and one (1) copy of this document are enclosed.

Pedersen et al.  
Serial No. 09/905,638

Respectfully submitted,  
NIXON & VANDERHYE P.C.

By: \_\_\_\_\_



(B) J. Sadoff  
Reg. No. 36,663

1100 North Glebe Road, 8th Floor  
Arlington, VA 22201-4714  
Telephone: (703) 816-4000  
Facsimile: (703) 816-4100

Pedersen et al.  
Serial No. 09/905,638



Sheet 1 of 1

**INFORMATION DISCLOSURE  
CITATION**

(Use several sheets if necessary)

ATTY. DOCKET NO.

4170-82

APPLICANT

Pedersen et al.

FILING DATE

July 13, 2001

SERIAL NO.

09/905,638

GROUP

1651

RECEIVED  
MAY 19 2003

TECH CENTER 1600/2900

**U.S. PATENT DOCUMENTS**

*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	5,976,848	11/1999	DAVIS et al.			
TRANSLATION						
	DOCUMENT	DATE	COUNTRY	CLASS	SUBCLASS	YES NO
	2,078,163	03/1993	Canada			
	41 30 833	03/1993	Germany			
	00/36138	06/2000	WO			
	198 57 619	06/2000	Germany			

**OTHER DOCUMENTS (including Author, Title, Date, Pertinent pages, etc.)**

	THOMAS et al., Aminoimidazole Carboxamide Ribonucleoside Toxicity: A Model for Study of Pyrimidine Starvation, Journal of Cellular Physiology, 107:336-344 (1981)
	MIERSCH et al., Biological Activity and Mode of Action of some Dihydroorotic and Dihydroazaorotic Acid Derivatives, Vol. 46, No. 5, (1987), pp. 307-315
	DUKE, Overview of Herbicide Mechanisms of Action, Environ. Health Perspectives, (1990) 87:263-271
	GUSTAFSON et al., Evidence that the Phenoxyquinoline Fungicides LY214352 and Quinoxifen have Different Modes of Action, Modern Fungicides and Antifungal Compounds II, Chapter 11, Intercept Limited, Andover, UK, pp. 93-100
	GILCHRIST, Molecular Modes of Action, Toxins and Plant Pathogenesis, (1983), pp. 81-136
	SAENGER et al., 6-Azauridine-5' -phosphoric Acid: Unusual Molecular Structure and Functional Mechanism (1973) Nature 242 :610-612
	LINDSAY et al., Inhibitory Effects of 2-thiouracil and 2-thiouracil Metabolites on Enzymes Involved in Pyrimidine Nucleotide Biosynthesis, (1974), Biochem. Pharm. 23:2273-2281
	NAGUIB et al., 5-Benzylbarbituric Acid Derivatives, Potent and Specific Inhibitors of Uridine Phosphorylase, (1993), Biochem. Pharm. 46 (7):1273-1283
	POTVIN et al., Inhibition by Barbituric Acid and its Derivatives of the Enzymes in Rat Brain which Participate in the Synthesis of Pyrimidine Ribotides, (1978), Biochem. Pharm. 27:655-665
	NIEDZWICKI et al., Structure-activity Relationship of Pyrimidine Base Analogs as Ligands of Orotate Phosphoribosyltransferase, (1984), Biochem. Pharm. 33:2383-2395
	NASR et al., Heterospecific Cloning of Arabidopsis..., (1994), Mol. Gen. Genet. 244:23-32
	DOREMUS et al., Subcellular Localization of the Pathway..., (1995), Plant Physiol. 79 :856-861
	DOREMUS et al., Site of Synthesis of the Enzymes..., (1987), Plant Physiol. 83-657-658
	DOREMUS, Organization of the Pathway..., (1986), Arch. Of Biochem. And Biophysics 25 (1):112-119
*Examiner	Date Considered

Examiner Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to application.

Form PTO-FB-A820 (Also PTO-1449)